

[Editor's Note: In 1989-90, NEXUS published two articles about Yull Brown and Brown's Gas (vol. 1, nos 8 & 9). We were then under the impression that Yull Brown was the inventor, and it wasn't until many years later that we learned of William Rhodes's patent on the gas. We have retained the name "Brown's Gas" for reasons of historical continuity in NEXUS and because of its widespread use on the Internet. For more details on successful applications of Brown's Gas. refer to the Eagle-Research Inc. website (www.eagle-research.com), which is where we obtained most of the following information.]

BROWN'S GAS COULD CHANGE THE WORLD by George Wiseman © 2006

What is Brown's Gas?

The current theory of Brown's Gas states that it is a mixture of diatomic and monatomic hydrogen and oxygen. My new theory of Brown's Gas is that it is "electrically expanded water".

Working with scientists and experimenters around the world, we have discovered several new things about Brown's Gas, leading me to the conclusion that it may *not* be monatomic hydrogen and oxygen but is instead a special form of *water*—actual water which has had enough electrical energy added to it to form a gas that is *not* steam.

Applications of Brown's Gas

We are learning more applications for the gas all the time. Apart from having amazing welding, cutting, brazing, fusing and soldering abilities, the gas can be used in making super-pure water (literally formed from atoms), spot glazing for ceramics, repairs on exotic materials, enhancing combustion of petro-fuels, neutralising radioactive waste, etc.

We expect people who use the WaterTorches to discover uses we haven't even thought of. The possibilities are so endless that this technology could change civilisation as we know it.

Welding

Glass: Brown's Gas welds glass well.

Quartz: Quartz requires very high energies to melt it, yet Brown's Gas works better than anything I've seen.

Cast iron: A welding torch (no. 3 tip) was able to make a nice puddle and easily welded cast iron. I was just melting it together with no flux of any kind using a cast iron welding rod and the puddle method. I then took the glowing cast iron that I'd just welded and *dumped* it into water at room temperature. It did not break. After it had cooled down, I broke it to look at the weld. It looked perfect! I couldn't see a difference between the crystal structure of the weld and the "parent" metal.

Copper: Brown's Gas easily welds copper, using plain copper rod; no flux.

Aluminium: Brown's Gas provides so much energy in a pinpoint fashion that welding aluminium is easier than using oxyacetylene.

Fusing

Brown's Gas works great to melt glass and fuse it around various materials. You can fuse iron to brick, for example. BG also makes it easier to fuse materials together because each of the materials goes only to its melting or fusing temperature.

Soldering

Again, super easy; in fact, you need only a small flame to do the same work that a propane torch would do. It heats the material up so fast that the heat has less time to travel before the solder is done—a great benefit to pipe fitters. The tiny, laserlike, cold flame is a lot easier to work with in tight areas. Also, if you work in tight areas, it is important to note that this flame doesn't pollute and use up your oxygen.

• Brazing

Brown's Gas brazes better than oxyacetylene. I even braze stainless steel. • Pre-heating

Pre-heating is one of the all-time best uses for Brown's Gas—particularly on materials that require a lot of energy to heat, like stainless steel. This gas allows you to pre-heat in a tiny spot or a whole area, and it is clean: only water is the byproduct. Since Brown's Gas has a "cold" flame, which applies the potential energy directly to the material being heated, the temperature that the material will heat to is dependent on the size of your flame and the material's ability to dissipate this type of energy. We've discovered that different materials go to different temperatures and that the materials that are poor heat conductors heat up very quickly when a Brown's Gas flame is applied. We have been able to melt every material we've applied to this flame. The higher the melting temperature of the material, the faster this flame heats it up.

Vaporising

The kicker is that Brown's Gas will vaporise materials like tungsten and diamond, but it will only very slowly heat water. So you have to take care what you want to pre-heat, because the gas heats every material to a different temperature, mostly depending on that material's ability to shed heat. When you try to melt materials like rock, ceramic and brick, the material changes characteristics, looking like a fused glass. If you continue to apply Brown's Gas, the various materials will either melt or vaporise till you have only a pure form left. This resulting material has unique characteristics that its original form did not; for example, it's very much harder. If you keep heating this with Brown's Gas, it will vaporise, too.

Controversial Uses

We mention these applications here so that you can see why Brown's Gas would be of interest to nearly anyone. Some of these applications are politically too hot for us to touch right now. We have enough internal (Eagle-Research) evidence to mention these uses as potentially real and are working to get independent verification. (Disclaimer: Until we have independent verification, we are describing the below information as *rumours*.

• Creating pure "new" water

We're learning that water can be "programmed" to pass on health-giving properties. This is easy to do with the water formed by the "exhaust" of the

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Brown's Gas flame. The production of Brown's Gas appears to "erase" previous programming, meaning that we can impress new programming on the water as it is newly reformed. We can make water that gives a feeling of relaxation and wellbeing just by drinking it.

· Hydrating water

When Brown's Gas is bubbled through clean water, the water absorbs oxygen and hydrogen. We think there is an additional energy (electrical in nature) added to the water as well. Drinking the resulting enhanced, oxygenated and hydrated water makes us alert—like drinking a cup of coffee, but without the side effects. Every test of Brown's Gas—enhanced water shows it to be super-hydrating—far superior to regular water (as much as 10 times).

Detoxifying water

In North America, chlorine is used to purify water by killing the micro-organisms that cause disease. Chlorine is a deadly poison: just enough is put into the water to kill the micro-organisms and not the person drinking it. Most of the rest of the world purifies water using ozone, a form of oxygen. Oxygen kills the micro-organisms without harm to people. Brown's Gas is an excellent way to oxygenate drinking water.

Humidifying

We now live in an area that has very dry air. We were using nearly a gallon (four

litres) of water a night in our humidifier to keep our bedroom air moist enough so that we could breathe easily. Brown's Gas gives us the same results using only a cup (250 mL) of water per night.

• Relaxing muscles, relieving pain

When Brown's Gas is applied to the skin, hydrogen and oxygen are absorbed which then flow (via blood) to muscles and joints that have problems due to dehydration, resulting in nearly instant relief of pain caused from cramps and swelling. This relief continues for extended periods.

· Speed-healing of wounds

When Brown's Gas is applied to a wound, hydrogen and oxygen are absorbed, killing anaerobic micro-organisms and assisting cell regeneration.

Helping plants germinate/grow

Plant growth can be enhanced by hydrated and/or "programmed" water. The resulting plants and fruits are more healthful to eat, providing nutrition and energy that most current produce cannot.

Neutralising radioactive waste

It has now been officially proven (in Canada) that Brown's Gas can neutralise radioactive waste in seconds, easily and extremely inexpensively. This neutralisation treatment can take place right at the nuclear reactor, so there is no need to transport or store nuclear waste. This issue is so politically *hot* that we deliberately do not promote it. Brown's Gas technology is not firmly enough in general use to prevent suppression by "vested interests". This single application is worth billions of dollars and could revolutionise the nuclear power generation industry.

· Creating new industrial materials

Brown's Gas can make rubies and weld them together. It can also weld sapphires together. When Brown's Gas cooks rocks, it turns them into semi-precious material; e.g., feldspar (30% of the Earth's crust) turns into a transparent form of moonstone which can be used as a building material that's nearly indestructible.

• Transmuting elements

We've learned of two ways of using Brown's Gas to make materials that did not exist in the original samples. We can make metals from water.

• Disposing of toxic waste

Brown's Gas is an implosive flame with the power to reduce nearly any material to its basic components (usually non-toxic). Enclosed chambers can be built in which to vaporise PCBs and other toxic waste.

Increasing recoverable ore

In tests conducted by several mines, ore treated with Brown's Gas allowed recovery of up to three times more minerals. Brown's Gas can be used to treat waste dumps of obsolete mines, recovering more minerals than the mine originally produced.

Again, this application is worth billions of dollars.

Improving underwater breathing

Brown's Gas is nontoxic and breathable. When used as an underwater breathing gas, it allows divers to stay underwater longer and come up faster because the hydrogen does not cause the bends as much as nitrogen or helium. This would allow much more use of ocean resources.

• Heating rooms

Generally, Brown's Gas is a poor way to heat spaces because the flame radiates very little infrared (heat) energy. However, there is evidence that, using catalytic materials, a Brown's Gas heater can



Schematic of a Brown's Gas generator used in welding. (Source: NEXUS, vol. 1, no. 8)

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be constructed that radiates huge amounts of heat and does not require any room venting. The efficiencies stated are 400%. In other words, a 1,000-watt input will produce 4,000 watts of heat. Eagle-Research has not yet verified this, but has seen enough evidence to list it here.

Treating surfaces

When a Brown's Gas flame is played over the surface of materials, there are effects that can be beneficial. Iron becomes rust-resistant and can be surfacehardened to prevent wear. Brick and cement become corrosion- and water-proof.

Enhancing combustion

Brown's Gas has been proven to help burn water/fossil-fuel mixtures in ratios of up to 90% water. This works in internal *and* external combustion (from vehicles to home heating and electrical power plants).

A Brief History of Brown's Gas

1832 – Michael Faraday discovered the laws of electrolysis, and separated hydrogen from water by using electricity.

1875 – Jules Verne wrote in *The Mysterious Island*: "Water decomposed into its primitive elements, and decomposed doubtless by electricity, which will then have become a powerful and manageable force... I believe that water will one day be employed as a fuel."

1935 – Henry Garrett patented an electrolytic carburettor, making a car able to run on water.

1962 – William Rhodes (USA) is the first inventor known to patent an electrolyser that produced the simple "single-ducted" gas we now call "Brown's Gas". In the mid-1960s, Rhodes formed the Henes Corporation, but his partners took control of the operation and cut him out. This was a bad mistake, because they did not yet have his most efficient design. Henes Corp. eventually failed, went through several hands and was eventually acquired by Dennis McMurray. The company, now named Arizona Hydrogen, is doing well in Phoenix, Arizona, USA.

1974 – Yull Brown (1922–1998), originally a Bulgarian named Ilya Velbov who migrated to Australia, filed a patent on his design of a Brown's Gas electrolyser and spent the rest of his life trying to make Brown's Gas a commercial success. He spent about \$30 million and nearly 30 years in this endeavour. Several companies were started, both in cooperation and in competition with Yull Brown.

1991 - Kim Sang Nam from Korea

visited Yull Brown's laboratory in the suburbs of Sydney. This was the start of Brown's cooperation with BEST Korea Co. Ltd. They succeeded in developing innovative technology relating to Brown's Gas (which they call "Brown Gas"; see website www.BrownGas.com). Today BEST Korea, together with Norinco from China, is one of world's largest manufacturers of Brown's Gas generators.

1991 – Teslalein Research in The Netherlands started research into Brown's Gas. In February 2006, scientist and inventor Loek Gans built a self-supplying Brown's Gas generator that is powered by solar energy. It generates three hours of gas on one 1-amp single solar panel a day.

1994 – George Wiseman of Eagle-Research, Canada, started an independent research program on Brown's Gas and threw aside traditional electrolyser technology. He drew upon the company's research in alternative energy and achieved a superior electrolyser design.

Eagle-Research independently duplicated William Rhodes's most efficient design, with enhancements. Rhodes has reviewed and confirmed the Brown's Gas technology. Today, Eagle-Research sells Brown's Gas generators and many other alternative energy solutions. **2006** – Brown's gas technology is becoming better known worldwide and is being used in several applications. Research is being conducted around the world. Some large oil companies see the benefits of it for the long term; they are not threatened by this technology because it will increase their profits. Investment companies are getting involved on quite a large scale. Many individuals are also picking up the technology. The Brown's Gas hydrogen technology business for car fuel savers is growing.

Many politicians and governments are becoming involved in this technology because of its non-polluting, ecological benefits. They understand that Brown's Gas technology offers a clean, everlasting energy that's available everywhere.

Contact details:

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George Wiseman shows off the ER 1200 WaterTorch.